SIEMENS

Data sheet 3UF7113-1AA00-0

Current/voltage measuring module Set current 20...200 A voltage measurement up to 690 V, overall width 120 mm, straight-through transformer



Product brand name	SIRIUS
Product designation	Current/voltage measuring module

General technical data	
Product function	
• Current measurement	Yes
• voltage measurement	Yes
• active power measurement	Yes
• Power measurement	Yes
• frequency measurement	No
Current measuring range extension with external current transformers	No
Measurable supply voltage between the outer conductors at AC maximum rated value	690 V
Outer conductors and neutral conductors internal resistance for voltage measurement	1 MΩ; R-based voltage divider
Product component	
• input for thermistor connection	No
Insulation voltage	
• with degree of pollution 3 at AC rated value	690 V

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• for wires of main circuit acc. to IEC 60947-1 rated value	6 kV
Surge voltage resistance rated value	8 000 V
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	15g / 11 ms
Vibration resistance	1-6 Hz / 15 mm; 6-500 Hz / 2 g
Reference code acc. to DIN EN 81346-2	F
Certificate of suitability	
• according to ATEX directive 2014/34/EU	BVS 06 ATEX F001
Explosion device group and category according to ATEX directive 2014/34/EU	II (2) G, II (2) D, I (M2)

Electromagnetic compatibility

EMC emitted interference	
• acc. to IEC 60947-1	class A
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m

Inputs/ Outputs

Number of outputs as contact-affected switching element	0

Protective and monitoring functions

Product function	
• power factor monitoring	Yes
• ground-fault monitoring	No
• voltage detection	Yes
Product function	
• Current detection	Yes
• Overload protection	Yes

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	screw and snap-on mounting
Height	95 mm
Width	120 mm
Depth	145 mm
Required spacing	
• top	30 mm

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• bottom	30 mm
• left	0 mm
• right	0 mm
Diameter of feed through opening	25 mm
Diameter of feed through opening for current measurement	25 mm

Connections/ Terminals

Type of electrical connection	
• for main current circuit	straight-through transformers
• for auxiliary and control current circuit	screw-type terminals
Type of electrical connection at the measurement inputs for voltage	screw-type terminals
Type of connectable conductor cross-sections at the measurement inputs for voltage	
• finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• solid	1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²)
• at AWG conductors solid	1x (20 ... 14), 2x (20 ... 14)
• at AWG conductors stranded	1x (20 ... 14), 2x (20 ... 16)
Tightening torque at the measurement inputs for voltage	0.8 ... 1.2 N·m
Tightening torque [lbf·in] at the measurement inputs for voltage	7 ... 10.3 lbf·in

Ambient conditions

Installation altitude at height above sea level	
• 1 maximum	2 000 m
• 2 maximum	3 000 m; max. +50 °C (no protective separation)
• 3 maximum	4 000 m; max. +40 °C (no protective separation)
Ambient temperature	
• during operation	-25 ... +60 °C
Environmental category	
• during operation acc. to IEC 60721	3K6 (no formation of ice, no condensation, relative humidity 10 ... 95%), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
• during storage acc. to IEC 60721	1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4
• during transport acc. to IEC 60721	2K2, 2C1, 2S1, 2M2
Relative humidity	
• during operation	5 ... 95 %

Short-circuit protection

Product function Short circuit protection	No

Safety related data

Safety Integrity Level (SIL) acc. to IEC 61508	1

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Main circuit	
Number of poles for main current circuit	3
adjustable pick-up value current of the current-dependent overload release	20 ... 200 A
Operating voltage	
• at AC	
— at 50 Hz rated value	110 ... 690 V
— at 60 Hz rated value	110 ... 690 V
Operating frequency rated value	50 ... 60 Hz

Control circuit/ Control	
Type of voltage	AC

Certificates/ approvals

General Product Approval				EMC	For use in hazardous locations
CCC	CSA	UL	EAC	RCM	ATEX

For use in hazardous locations	Declaration of Conformity	Test Certificates		Marine / Shipping
IECEx	EG-Konf.	Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report	ABS

Marine / Shipping			other		
LRS	RMRS	DNVGL.COM/AF	Confirmation	PROFINET-Certification	Profibus

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
www.siemens.com/ic10

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UF7113-1AA00-0

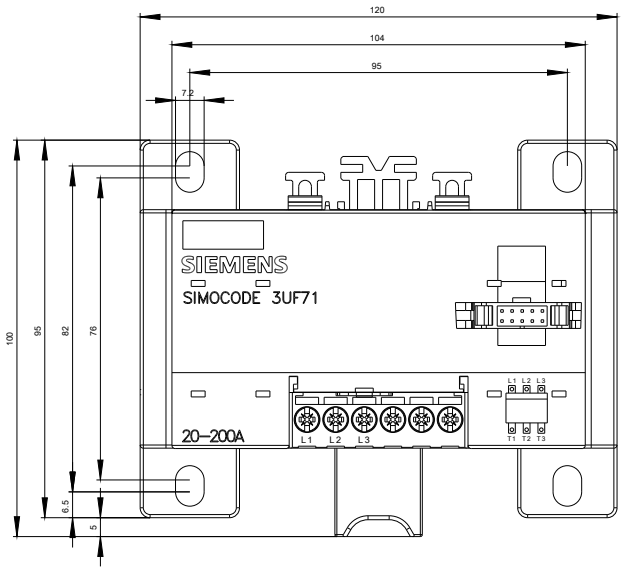
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7113-1AA00-0

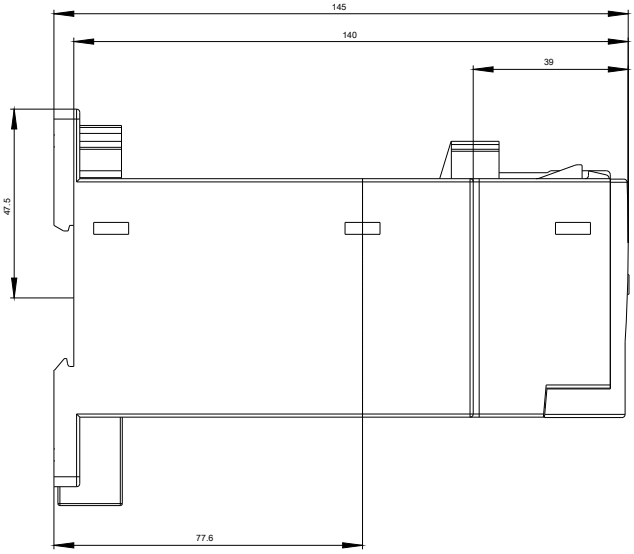
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UF7113-1AA00-0

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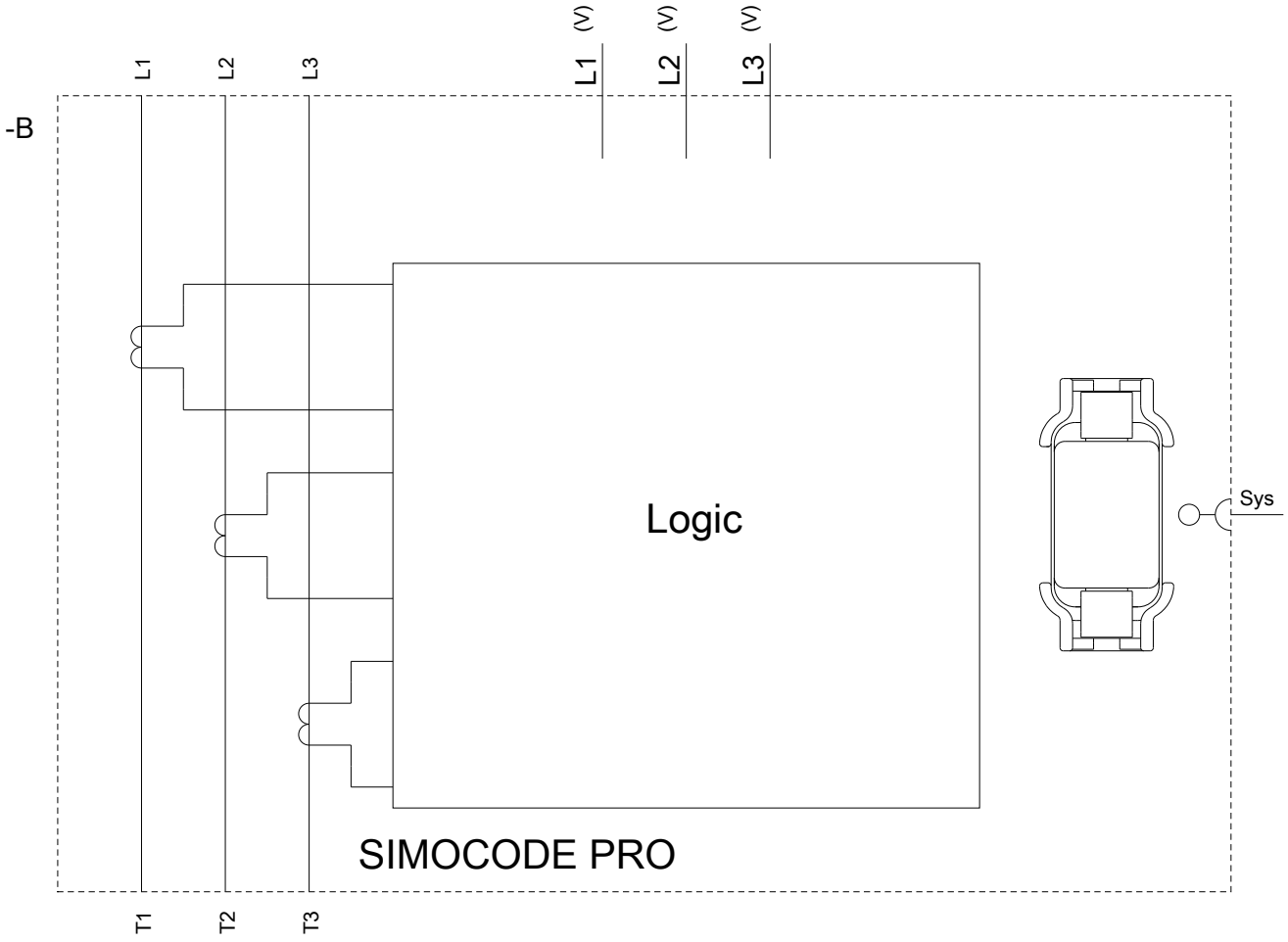
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7113-1AA00-0&lang=en

Test report No. A0258, protective separation
https://support.industry.siemens.com/cs/ww/en/view/109748152





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